

Atty. Docket No. YOR20010151US1
(590.057)

REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

Claims 1-4, 6-9, 12-21, 24-29, and 31-49 are currently pending for examination, of which claims 1, 24, 25, 27 and 46-49 are independent; the remaining claims are dependent claims. Applicants have rewritten independent claims 1, 24, 27, and 46-48 and dependent claims 4 and 29. Applicants intend no change in the scope of the claims by the changes made by this amendment. It should be noted these amendments are not in acquiescence of the Office's position on allowability of the claims, but merely to expedite prosecution.

Rejections under 35 U.S.C. § 112, 2nd paragraph:

Claims 4 and 29 stand rejected under 35 U.S.C. § 112, 2nd paragraph for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 4 and 29 stand rejected under 35 U.S.C. § 112, 2nd paragraph for use of the claim terminology "and a significant change in parameters relating to a user." The Examiner considers this terminology to be improper because, according to the Examiner,

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one of ordinary skill in the art would not know what constitutes a "significant" change to cause a trigger of execution.

Claims 4 and 29 have already been amended to replace the claim terminology of "sufficient" with "significant." Applicants respectfully submit that claims 4 and 29, as amended, particularly point out and distinctly claim the subject matter that Applicants regard as the invention and would be easily understood by one of ordinary skill in the art. Support for these amendments can be found, *inter alia*, at page 21 lines 6-10 of the Specification. Applicants respectfully request that the Examiner withdraw the rejection of claims 4 and 29 under 35 U.S.C. § 112, 2nd paragraph.

Applicants note that the present amendments to claims 4 and 29 are made to address the Examiner's rejections under 35 U.S.C. § 112, 2nd paragraph and not to overcome any cited prior art.

**Rejections under 35 U.S.C. § 103(a)
over Shoham ('989) in view of Boyden ('0036964):**

Claims 1-4, 6-7, 9, 12-17, 21, 25-29, 31, 32, 34-40, 43-45, 47 and 49 stand rejected as being unpatentable over U.S. Patent 6,285,989 to Shoham (hereinafter Shoham ('989)) in view of U.S. Published Application 2003/0036964 of Boyden et al. (hereinafter Boyden ('0036964)) under 35 U.S.C. § 103(a).

As best understood, Shoham ('989) teaches a universal on-line trading market design and deployment system comprising a market-specification console (MSC), a programmable auction server (PAS), a universal trading console (UTC), a universal

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surveillance console (USC), a market administration console (MAC), and a communications network that connects the various components in the system (Fig. 1 and Col. 5, lines 20-57).

In the outstanding Office Action, the Examiner asserted that the limitation of "automatically" performing processes can be readily broadly construed as processes performed by a computer that are triggered manually by a user. Although there are embodiments of the instant invention that can also be triggered by a user or utilizing some sort of user intervention, the crux of the invention is embodied by the automatic bidding without user intervention. Thus, the independent claims have been amended to address this. Consequently, the comments of the Examiner are no longer applicable, as the independent claims explicitly state that the user interaction is not required nor utilized with the automatic processes of the instant invention. Thus, it is respectfully submitted that the existing rejections be withdrawn as they no longer meet the limitations of the instant invention.

As to issues of enablement with respect to automatically choosing an order method without user intervention, Figure 5 and the corresponding text in the specification explicitly state ways in which to choose order methods without any user intervention. Specifically, the choice of order computation method is based on the size of the order history. For example, the belief-function method would be executed only if in the order history the number of orders or trades exceeds a specified threshold. Otherwise, an alternative pricing algorithm could be used. Among the possibilities are Zero-Intelligence Zero-Intelligence Plus. Another alternative pricing algorithm that is usable even if no

order history exists is to bid an amount that depends solely on the limit prices. A second method is to compute the order price by selecting a price randomly from an interval ranging from $L(s)$ to a specified factor g times $L(n)$. Thus, as can be readily seen, the specification enables the automatic choice of an order method without user intervention, instead basing the choice on the order history and automatically determining the best order method. Thus, it is respectfully submitted that the Examiner's assertion that this choice could not be made without user intervention is incorrect and the claims as amended are enabled by the specification as filed.

Shoham ('989) does not teach "automatically augmenting said market history with said previous market history based on consideration of the relevancy of said previous market history to the ongoing auction without user intervention (claim 1)."

Nor does Shoham ('989) teach "automatically choosing an order computation method from a plurality of order computation methods without user intervention (claim 25)."

As best understood, Boyden ('0036964) teaches a method and system of valuating used vehicles for sale at an electronic auction using a computer. As part of the valuations provided by the auction service a buyer is provided with various independent used car valuations such as the "Kelley Blue Book" valuation via a webpage or electronic message. The valuation is provided to assist a buyer in making a bid on a car up for auction (Figs. 3C, 3D, & 10 and ¶¶ [0043], [0044], & [0068]). The Examiner asserts that this feature corresponds to Applicants' claimed subject matter in claim 1 discussed above.

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The Examiner states that it would have been obvious to one of ordinary skill in the art to incorporate such a feature into the auction system of Shoham ('989) for the purpose of providing an auction participant with a historical perspective on the valuation of items at auction.

Boyden ('0036964) also teaches that a bidder can acquire used cars in three different manners. A bidder can manually input bids to the system (Fig. 3F), utilize a simple proxy program that automatically increases a bidder's bid up to a maximum value input by the bidder (Fig. 3G), or a bidder can simply purchase the vehicle at a seller's purchase price thus foregoing the auction process (Fig. 3I) (¶¶ [0040]-[0051]). The Examiner asserts that this feature corresponds to Applicants' claimed subject matter in claim 25 discussed above. The Examiner states that it would have been obvious to one of ordinary skill in the art to incorporate such a feature into the auction system of Shoham ('989) for the purpose of providing a bidder with flexibility in bidding to obtain a particular good or service (rejection of claim 24).

Applicants respectfully submit that in order to establish a *prima facie* case of obviousness three criteria must be met. First, there must be some suggestion or motivation to modify a reference or combine reference teachings, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Second, the modification or combination must have some reasonable expectation of success. Third, the prior reference or combined references must teach or suggest all the claim limitations. MPEP § 2143. The teachings of a prior art reference must be

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considered **as a whole** including those portions that would lead away from the claimed invention. MPEP § 2141.02(VI).

With regards to independent claim 1, Applicants respectfully submit that the combined teachings of Shoham ('989) and Boyden ('0036964) do not teach or suggest all of the claim limitations.

Claim 1, as amended, recites "automatically augmenting said market history with said previous market history based on consideration of the relevancy of said previous market history to the ongoing auction **without user intervention.**"

As noted by the Examiner Shoham ('989) does not teach the method steps of obtaining market history information related to auctions other than the ongoing auction and aggregating that information into a previous market history or augmenting a market history based on consideration of relevancy of the previous market history to the ongoing auction.

Boyden ('0036964) teaches providing one or more different independent valuations, such as the "Kelley Blue Book" valuation, to a bidder in order to aid a bidder in making an informed and confident bid (Figs. 3C, 3D, & 10 and ¶¶ [0043], [0044], & [0068]). Even if this feature could be considered to correspond to Applicants' claimed method steps in some manner the feature does not **automatically** augment a market history relating to an ongoing auction with these independent valuations based on their relevancy to the ongoing auctions **without user intervention** as is currently claimed.

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If such valuations are considered at all they are only considered by a bidder upon viewing the valuations and in deciding whether to make a bid at a certain price or in just buying the vehicle at the seller's price. The process is not **without user intervention**; rather it is up to the bidder him/her/itself to consider such valuations and their relevance to the ongoing auction. Boyden ('0036964) therefore fails to overcome the deficiencies of Shoham ('989) with regards to the currently claimed subject matter and further rejection of claim 1 on these grounds would be improper.

For the foregoing reasons, Applicants respectfully submit that claim 1 is allowable over Shoham ('989) and Boyden ('0036964). Applicants respectfully request that the Examiner withdraw the rejection of claim 1 as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under 35 U.S.C. § 103(a).

With regards to the rejections of claims 2-4, 6, 7, 9, 12-17, and 21, these claims are all dependent upon independent claim 1. Applicants respectfully submit that these claims are allowable over Shoham ('989) and Boyden ('0036964) for at least the same reasons as discussed above with regards to claim 1. Applicants respectfully request that the Examiner withdraw the rejection of these claims as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under § 103(a).

With regards to independent claim 25, Applicants respectfully submit that the combined teachings of Shoham ('989) and Boyden ('0036964) do not teach or suggest all of the claim limitations.

The Examiner does not address the limitation added by Applicants as to a method step of “**automatically** choosing an order computation method from a plurality of order computation methods **without user intervention.**” The Examiner does address similar subject matter in the rejection of claim 24, however, so with the lack of indication as to how exactly claim 25 stands rejected Applicants’ remarks here will also be directed to the comments made by the Examiner with regards to the rejection of claim 24.

Shoham (‘989), as noted by the Examiner, does not teach a plurality of order computation methods or the choosing of one order computation method from such a plurality.

As best understood, Boyden (‘0036964) teaches that a bidder can purchase a used vehicle three different ways. A bidder can manually input a bid to the system as shown in Fig. 3F. A bidder may utilize a simple proxy that “ups” the bid up to a maximum bid input by the bidder to the system as shown in Figs. 3F & 3G. Or a bidder can simply buy a vehicle outright by indicating that he/she/it is willing to buy the vehicle at the seller’s price as shown in Figure 3I (¶¶ [0040]-[0051]). Even if this feature could be considered to correspond to Applicants’ claimed method step in some manner the feature does not **automatically** choose an order computation method from a plurality of order computation methods. Rather it is up to the user to **manually** choose which of these methods best suits his/her/its needs and purchasing strategy. Boyden (‘0036964) therefore fails to overcome the deficiencies of Shoham (‘989) with regards to the currently claimed subject matter of claim 25.

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The auction taught by Boyden ('0036964) is also conducted over the Internet and, as demonstrated above, is **not automatic, nor is it without user intervention**. Neither Shoham ('989) nor Boyden ('0036964) teach "automatically choosing of an order computation method from a plurality of order computation methods **without user intervention**." The rejection is therefore improper.

For the foregoing reasons, Applicants respectfully submit that claim 25 is allowable over Shoham ('989) and Boyden ('0036964). Applicants respectfully request that the Examiner withdraw the rejection of claim 25 as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under 35 U.S.C. § 103(a).

With regards to the rejection of claim 26, this claim is dependent upon independent claim 25. Applicants respectfully submit that claim 26 is allowable over Shoham ('989) and Boyden ('0036964) for at least the same reasons as discussed above with regards to claim 25. Applicants respectfully request that the Examiner withdraw the rejection of claim 26 as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under § 103(a).

With regards to the rejection of independent claim 27, this claim has been amended to recite "a computer-implemented arrangement for automatically choosing an order computation method from a plurality of order computation methods **without user intervention**" in order to track a similar method step limitation in claim 25. Applicants respectfully submit that claim 27 is allowable over Shoham ('989) and Boyden ('0036964) for at least the same reasons as discussed above with regards to claim 25.

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Applicants respectfully request that the Examiner withdraw the rejection of the subject matter of claim 27 as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under § 103(a).

With regards to the rejections of claims 28, 29, 31, 32, 34-40, and 43-45 these claims are all dependent upon independent claim 27. Applicants respectfully submit that these claims are allowable over Shoham ('989) and Boyden ('0036964) for at least the same reasons as discussed above with regards to claim 27. Applicants respectfully request that the Examiner withdraw the rejection of these claims as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under § 103(a).

With regards to the rejection of independent claim 47, this claim has been amended to recite "automatically choosing an order computation method from a plurality of order computation methods while taking into account the user specified parameters and the information relating to the history of orders **without user intervention**" in order to track a similar method step limitation in claim 25. Applicants respectfully submit that claim 47 is allowable over Shoham ('989) and Boyden ('0036964) for at least the same reasons as discussed above with regards to claim 25. Applicants respectfully request that the Examiner withdraw the rejection of the subject matter of claim 47 as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under § 103(a).

With regards to the rejection of independent claim 49, this claim recites the method step of "automatically choosing an order computation method from a plurality of order computation methods **without user intervention**" just as claim 25 does.

Applicants respectfully submit that claim 49 is allowable over Shoham ('989) and Boyden ('0036964) for at least the same reasons as discussed above with regards to claim 25. Applicants respectfully request that the Examiner withdraw the rejection of the subject matter of claim 49 as being unpatentable over Shoham ('989) in view of Boyden ('0036964) under § 103(a).

**Rejections under 35 U.S.C. § 103(a) over Shoham ('989)
in view of Boyden ('0036964), and further in view of *Price Formation*:**

Claims 18-20, 24, 41-42, 46, and 48 stand rejected as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of Gjerstad and Dickhaut, *Price Formation in Double Auctions* (hereinafter *Price Formation*) under 35 U.S.C. § 103(a).

As best understood, *Price Formation* teaches the formulation and proof for a belief function for use in an auction environment (§§ 2.4.2-2.4.6). Applicants would like to note that the teachings of *Price Formation* are not sufficient to overcome the previously discussed deficiencies in the teachings of Shoham ('989) and Boyden ('0036964) with regard to the claimed subject matter of claims 1 and 25.

With regards to claims 18-20, these claims are dependent upon independent claim 1. Applicants respectfully submit that claim 1 is allowable over Shoham ('989) and Boyden ('0036964) as established above. Claims 18-20 are also allowable, then, for at least the same reasons as claim 1. Applicants respectfully request that the Examiner withdraw the rejection of claims 18-20 as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of *Price Formation* under 35 U.S.C. § 103(a).

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With regards to the rejection of independent claim 24, this claim has been amended to recite "automatically choosing an order computation method from a plurality of order computation methods **without user intervention**" in order to track a similar method step limitation in claim 25. Applicants respectfully submit that claim 24 is allowable over Shoham ('989), Boyden ('0036964), and *Price Formation* for at least the same reasons as discussed above with regards to claim 25 (noting that *Price Formation* contains no teachings related to the above-mentioned claimed subject matter). Applicants respectfully request that the Examiner withdraw the rejection of the subject matter of claim 24 as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of *Price Formation* under § 103(a).

With regards to claims 41 and 42, these claims are dependent upon independent claim 27. Applicants respectfully submit that claim 27 is allowable over Shoham ('989) and Boyden ('0036964) as established above. Claims 41 and 42 are also allowable, then, for at least the same reasons as claim 27. Applicants respectfully request that the Examiner withdraw the rejection of claims 41 and 42 as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of *Price Formation* under 35 U.S.C. § 103(a).

With regards to the rejection of independent claim 46, this claim has been amended to recite "an arrangement for automatically choosing an order computation method from a plurality of order computation methods **without user intervention**" in order to track a similar method step limitation in claim 25. Applicants respectfully submit that claim 46 is allowable over Shoham ('989), Boyden ('0036964), and *Price*

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Formation for at least the same reasons as discussed above with regards to claim 25 (noting that *Price Formation* contains no teachings related to the above-mentioned claimed subject matter). Applicants respectfully request that the Examiner withdraw the rejection of the subject matter of claim 46 as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of *Price Formation* under § 103(a).

With regards to the rejection of independent claim 48, this claim has been amended to recite "automatically choosing an order computation method from a plurality of order computation methods **without user intervention**" in order to track a similar method step limitation in claim 25. Applicants respectfully submit that claim 48 is allowable over Shoham ('989), Boyden ('0036964), and *Price Formation* for at least the same reasons as discussed above with regards to claim 25 (noting that *Price Formation* contains no teachings related to the above-mentioned claimed subject matter). Applicants respectfully request that the Examiner withdraw the rejection of the subject matter of claim 48 as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of *Price Formation* under § 103(a).

**Rejections under 35 U.S.C. § 103(a) over Shoham ('989)
in view of Boyden ('0036964), and in further view of Harrington ('099):**

Claims 8 and 33 stand rejected as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of U.S. Patent 6,161,099 to Harrington et al. (hereinafter Harrington ('099)) under 35 U.S.C. § 103(a).

With regards to this rejection, claims 8 and 33 are dependent upon independent claims 1 and 27 respectively. Applicants respectfully submit that claims 1 and 27 are

allowable over Shoham ('989) and Boyden ('0036964) as established above. Claims 8 and 33 are also allowable, then, for at least the same reasons as claims 1 and 27.

Applicants respectfully request that the Examiner withdraw the rejection of claims 8 and 33 as being unpatentable over Shoham ('989) in view of Boyden ('0036964), and in further view of Harrington ('099) under 35 U.S.C. § 103(a).

Response After Final:

Applicants respectfully submit that the current Amendment After Final presents no new issues of patentability with respect to the independent claims and as such the current amendment may be properly entered by the Examiner under 37 C.F.R. § 1.116.

Applicants respectfully request that the Examiner enter and consider the current amendment. Furthermore, this Amendment will not result in any alteration of the prior art used to reject any dependent claim whose scope may have been changed by this Amendment in the unlikely event that the Examiner finds the independent claims to be unallowable.

The Shoham and Boyden references are the only references the Office has applied to reject the independent claims in the previous office actions. This fact, coupled with the Office's own explanation of the field of search,

The field of search should extend to all probable areas relevant to the claimed subject matter and should cover the disclosed features which might reasonably be expected to be claimed.

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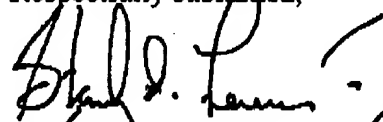
MPEP § 904.02(a), make it clear that the current Amendment requires no further search and consideration on the part of the Examiner beyond consideration of Applicants' foregoing Remarks and as such the Amendment should be entered.

Conclusion:

In view of the foregoing, it is respectfully submitted that Claims 1, 24, 25, 27, and 46-49 fully distinguish over the applied art and are thus allowable. By virtue of dependence from allowable Claims 1, 24, 25, 27, and 46-49, it is also submitted that Claims 2-4, 6-9, 12-21, 26, 28-29, 31-45 are allowable at this juncture as well.

In summary, it is respectfully submitted that the instant application, including Claims 1-4, 6-9, 12-21, 24-29, and 31-49, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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